- Medical Awareness

Why you shouldn't take antibiotic without doctor's advice

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When I got back to the clinic after a long absence a few weeks ago, a patient came for followup and proudly told me, "Doctor, I had fever and flu-like symptoms while you were abroad. I just took several capsules of an antibiotic and the fever was gone after a few days."

He expected me to give him a pat on the back for taking the initiative to treat himself with an antibiotic, without doctor's advice. I shook my head instead, and explained to him the folly of what he had just done.

Instances like this, which occur very often, are the reason we're running out of antimicrobials to treat our infections. In many cases, physicians request for a culture and sensitivity test, to determine which antibiotics the bug causing the infection in a patient is still sensitive to. Often, the result of the test comes out showing that the bacteria is already resistant to all commonly used antibiotics.

Ineffective

Antimicrobial resistance (AMR) happens when a microorganism (bacteria, viruses and some parasites) develops the ability to make antimicrobials such as antibiotics, antivirals, antimalarials and antituberculosis drugs ineffective or lose their potency. What happens next is that the microbes even multiply, and may spread to infect others.

The World Health Organization (WHO) warns that AMR hampers the effective prevention and treatment of an increasing range of infections caused by bacteria, parasites, viruses and fungi. It's not a remote possibility that in the foreseeable future, we'll run out of effective antimicrobials to treat prevalent infections.

Time was when practically all infections would respond to ordinary penicillin. Now, even ordinary microbes sometimes don't respond to potent antibiotics. And without effective antibiotics, major surgeries and cancer chemotherapy would al- so be compromised because the infection, which may complicate these treatments, can no longer be treated adequately.

AMR is a serious threat to global public health, and it's draining a lot of already limited resources in underdeveloped and developing countries like the Philippines because of the increased cost of healthcare for patients with resistant infections. The cost dramatically increases due to longer duration of illness, a series of tests that needs to be done, and the need for more potent and expensive drugs.

Experts say that AMR is actually expected to occur over time as a result of the natural evolution of microbes, probably due to genetic mutation. And we know that mutants generally are more potent than their original versions. But definitely, the misuse and overuse of antimicrobials is speeding up this process.

A common example of misuse of antibiotics is the case of my patient, who most likely just had a viral infection. These infections, like common colds and flu, are self-limiting and do not require an antibiotic unless there's a complicating bacterial infection due to weakened resistance. If that's the case, a doctor must be consulted before taking any antibiotic.

Even the use of antibiotics in animals contributes to AMR. In many places, antibiotics are misused to promote growth in animals or as a prophylaxis to prevent diseases in healthy animals. So even our veterinarians should be made aware of this problem.

Antimicrobial resistant- microbes can spread between people and animals, especially when one eats infected and inadequately cooked or raw food of animal origin. Poor sanitary conditions and food handling also promote the spread of antimicrobial resistance.

Drug-resistant PTB

I recall my good friend, renowned lung expert Dr. Camilo Roa, Jr., lamenting in one of his lectures that pulmonary tuberculosis (PTB), which is almost nonexistent in some first-world countries, remains a major cause of illness and death in our country because of the increasing incidence of drug-resistant PTB.

Cases of PTB should be treated with a minimum sixmonth course of anti-TB drugs. Some take it without a doctor's prescription when they have long-standing cough, and stop it when their coughs are gone. They may not even have PTB to start with.

Some who really have PTB take it only for a few weeks or months, and when they get bet- ter, they stop taking their prescribed antiTB regimen. The result is treatment-resistant TB. The TB bacteria will come back with a vengeance and will be resistant to the commonly prescribed antiTB drugs. More potent drugs will have to be given, which unfortunately have bothersome side effects.

Another colleague in infectious disease also said that a similar problem is arising for malaria.

The bacteria Es

cherichia coli, which is the most common cause of urinary tract infections, is now resistant to many antibiotics.

The same thing is true for gonorrhea, a sexually transmitted disease (STD). Other STDs like chlamydia and syphilis have suffered the same fate. Soon, even treatment for HIVAIDS may also be compromised, and that can be scary when it happens.

So, the next time you're tempted to pop your favorite antibiotic without doctor's advice, think again. Think AMR.